JC10 Rec'd PCT/PTO 23 DEC 2005

AMENDMENT TO THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with <u>strikethrough</u>. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

- (currently amended) Apparatus-An apparatus for singulating flat articles which 1. are transported on-edge as a stack (12)-on a controllably driven conveyor (3) with a stack support (4)-to the take-away station where the frontmost article (4) is taken away horizontally in a plane perpendicular to the feeding direction, having detectors projecting from the take-away reference plane (10)-at different heights for determining the position of the frontmost article (1)-at particular contact pressures which are connected to the drive controller of the conveyor-(3), the conveyor (3) and the stack support (4) being driven in a separately controlled manner, eharacterized in thatwherein supporting elements can be individually moved horizontally in a plane perpendicular to the takeaway reference plane using actuators (7,8,14) and the detectors for measuring the position of the frontmost article-(1), which are also provided for measuring the stack pressure, and that the drives of the actuators (7,8,14) of the conveyor (3)-and of the stack support (4)-can be controlled as a function of the ascertained position of the frontmost article (1) in such a way that when the stack (12) is transported to the take-away station the frontmost object-(1), supported by the supporting elements, is fed to the take-away station virtually parallel to the take-away reference plane (10)-with low stack pressure measured by the detectors at which it does not yet tip over or become deformed.
 - 2. (currently amended) Apparatus—The apparatus according to claim 1, characterized in thatwherein the control of the drives of the detectors with their actuators (7.8,14), of the conveyor (3)—and of the stack support (4) ensure the following sequence of operations:

 after take-away of the article (1), moving of the detectors with their actuators (7,8,14) out of the take-away reference plane (10) in the direction of the in-fed stack (12)—until at least two detectors detect the now frontmost article (1)—of the stack (12), determining the position of the detected article (1) and controlling the drives of

2003P07137WOUS Hans STEINHUEBEL

the actuators (7,8,14), of the stack support (4) and of the conveyor (3) in such a way that the end of the stack facing the take-away station is aligned parallel with the take-away reference plane (10)-and is transported in the aligned state, held between the detectors and the stack support-(4), with low defined stack station. and the take-away to pressure, - shortly prior to take-away of the frontmost article (1), retracting of the reference plane (10). take-away behind the detectors to

- 4. (currently amended) Apparatus—The apparatus according to claim 1, eharacterized in that wherein the stack support (4)—is pivotally mounted on a linear guide (5), the pivoting axis being horizontally oriented in a plane perpendicular to the take-away direction and the pivoting device (25) being controllable in such a way that the front articles in the stack (12)—viewed from the take-away station are fed in the required vertical orientation.
- 5. (currently amended) Apparatus—The apparatus according to claim 1, characterized in that wherein distributed over the length of the articles (1) in the stack (12) there are provided a plurality of detectors with actuators (7A,8A and 7B,8B)—disposed one above the other.
- 6. (currently amended) Apparatus The apparatus according to one of claims 1, 2, 3 or 5, characterized in that, wherein using the drive control, jogging movements of the detectors with variable amplitude, frequency and force can be generated.
- 7. (currently amended) Apparatus—The apparatus according to claim 1, characterized in that wherein there are one or more sensing rollers (9) rotatable in the take-away direction at the tips of the detectors.
- 8. (currently amended) Apparatus—The apparatus according to claim 1, eharacterized in that wherein the detectors with the actuators (7,8,14) consist comprise of linear motors (15) with an integrated position measuring

2003P07137WOUS Hans STEINHUEBEL

system (18), the motor current being used for force measurement.

- 9. (currently amended) Apparatus—The apparatus according to claim 1, characterized in thatwherein the detectors with the actuators (7,8,14) consist comprise—of linear motors (15)—with an integrated position measuring system—(18), a force measuring device being fixed to the head of the armature (17)—of the linear motor—(15).
- 10. (currently amended) Apparatus—The apparatus according to claim 8, characterized in thatwherein as a force measuring device there is provided a linearly displaceable ball (23) biased by means of a spring—(24), which ball triggers a switching signal in response to a particular force.